

REMARKS

Claims 1-20 are pending. Claims 16-20 are withdrawn from consideration. Applicant has amended the claims to more distinctly point out features of the invention and to correct informalities. No new matter has been added. Applicant respectfully requests reconsideration and withdrawal of the rejections to the claims.

Notice of Non-Compliant Amendment

In the Notice of Non-Compliant Amendment, the Examiner indicated that added paragraphs should not be underlined and the location of a new paragraph should be unambiguously identified. It is respectfully submitted that the amendments to the specification contained in this paper are in compliance with 37 CFR 1.121.

Amendments to Specification

Amendments have been made to the specification at pages 1 and 10 in order to claim priority to the foreign application and to address objections to the specification regarding informalities. No new matter has been added as the amendments have support in the specification and drawings as originally submitted.

Affirmation of Election

Applicant affirms the election of claims 1-15 and the withdrawal of claims 16-20 by the Examiner.

Objection to Specification

The Examiner objected to the specification due to informalities. Specifically, the Examiner indicated that reference numeral “23” at page 11, ll. 8 and 11, should be “27” based on the disclosure in FIG. 7.

With this paper, the specification has been amended to replace reference numeral “23” with “27” at page 11, ll. 8 and 11. It is respectfully submitted that the ground for the objection have been overcome and it is respectfully requested that the objection be withdrawn.

§103 Rejections

Claims 1-14 were rejected under 35 USC 103 as obvious in view of Flanders et al. (US Pat 6,768,756, hereinafter Flanders).

Applicant respectfully submits that independent claims 1 and 6 are allowable over the cited reference before the current amendment. That is, regarding the structure of Flanders, Applicant respectfully submits that Examiner has not clearly identified several of the claimed elements. For example, with respect to the ‘micro actuating means’, the Examiner made no identification. If the Examiner is likening the spacer device 114 of Flanders to the micro actuating means, then the Applicant submits that the spacer device 114 does not comport with the specification which discloses ‘a parallel plate capacitor including a first electrode formed at a predetermined region of a periphery of the concave mirror formed at one surface of the movable part’. Additionally, with respect to the plane mirror and the lower substrate, Applicant submits that the spacer device of Flanders is not a mirror, and if it is, then no lower substrate is disclosed by Flanders. Applicant therefore submits that independent claims 1 and 6 are allowable over the cited reference.

Furthermore, Flanders is directed to a MEMS membrane with integral mirror/lens, and teaches an optical membrane device with an optically curved surface. However, with reference to the amended claims, Flanders does not teach or suggest ‘an optical resonator comprising a transparent lower substrate for light penetration, a plane mirror formed at one surface of the lower substrate, an upper substrate coupled to the lower substrate with a certain gap, and a concave mirror formed at one surface of the upper substrate for forming a resonance cavity of a hemispherical shape with the plane mirror, wherein, the lower substrate and the upper substrate are aligned and bonded’, as required by amended claim 1. That is, although Flanders teaches an optical membrane device with an optically curved surface, Flanders does not teach an optical resonator in which the lower substrate and the upper substrate are aligned and bonded, as required by amended claim 1. Therefore, Flanders does not teach all the claimed elements of amended claim 1, as required for a rejection under 35 USC 103, even with the Examiner’s assertion of knowledge in the art. Thus, claim 1 is allowable over the cited reference. Amended independent claim 6 is also allowable over the cited reference, because it incorporates similar limitations as claim 1.

Claim 15 is rejected under 35 USC 103 as obvious in view of Flanders and Jian (US 2003/0002809).

Applicant respectfully submits that independent claim 15 is allowable over the cited references before the current amendment. That is, regarding the structure of Flanders, Applicant respectfully submits that Examiner has not clearly identified several of the claimed elements. For example, with respect to the ‘micro actuating means’, the Examiner made no identification. If the Examiner is likening the spacer device 114 of Flanders to the micro actuating means, then the Applicant submits that the spacer device 114 does not comport with the specification which discloses ‘a parallel plate capacitor including a first electrode formed at a predetermined region of a periphery of the concave mirror formed at one surface of the movable part’. Additionally, with respect to the plane mirror and the lower substrate, Applicant submits that the spacer device of Flanders is not a mirror, and if it is, then no lower substrate is disclosed by Flanders. Applicant therefore submits that independent claim 15 is allowable over the cited references.

The deficiencies of Flanders are set forth above. Jian is directed to vertically integrated optical devices coupled to optical fibers, and teaches vertically integrated optical components in a multilayer arrangement. However, with reference to the amended claims, Jian does not teach or suggest an optical resonator in which the lower substrate and the upper substrate are aligned and bonded, as required by amended claim 1. Therefore, Jian does not teach all the claimed elements of amended claim 1, as required for a rejection under 35 USC 103, even with the Examiner’s assertion of knowledge in the art. Thus, Jian does not cure the deficiencies of Flanders and the combination of Flanders and Jian does not teach all the elements of amended claim 15. Therefore, claim 15 is allowable over the cited references.

Allowability of Claims

Because amended independent claims 1, 6 and 15 are distinguishable over the cited references, Applicant respectfully submits that the §103 rejections should be withdrawn. Amended claims 2-5 are allowable by virtue of their dependency on allowable claim 1, and also because they each recite independently patentable features not taught or suggested by the cited references, either alone or in combination. Amended claims 7-14 are allowable by virtue of their dependency on allowable claim 6, and also because they each recite independently patentable features not taught or suggested by the cited references, either alone or in combination. (See

MPEP 2143.03 'If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious').

Conclusion

Applicant respectfully requests that the Examiner reconsider and withdraw the claim rejections, and issue a notice of allowance. No amendment made was related to the statutory requirements of patentability unless expressly stated herein, and no amendment made was for the purpose of narrowing the scope of any claim, unless Applicants have expressly argued herein that such amendment was made to distinguish over a particular reference or combination of references.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California, telephone number (213) 623-2221 to discuss the steps necessary for placing the application in condition for allowance.

Respectfully submitted,

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